



# Academic Summarization via “Twitter” in a College EFL Context

Rawan Khalid Almuwayshir

Department of English, King Saud University, Riyadh, Saudi Arabia

Email: rawan.almoisheer@gmail.com

**How to cite this paper:** Almuwayshir, R.K. (2021) Academic Summarization via “Twitter” in a College EFL Context. *Open Access Library Journal*, 8: e7273. <https://doi.org/10.4236/oalib.1107273>

**Received:** March 1, 2021

**Accepted:** April 27, 2021

**Published:** April 30, 2021

Copyright © 2021 by author(s) and Open Access Library Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

## Abstract

The purpose of the current study is to investigate the effect of the limitation of 140-character in Twitter versus the free writing on the skill of the summary of senior level female students of the Department of English at Jouf University. The participants of the study consisted of 60 female students who were enrolled in writing skills course (ENGL122) the participants were distributed into two groups, each of 30 students according to their scores in TOEIC, test of English for International Communication. After that, the pre-test was administered to the two groups. Both groups had the same instructor but each group was instructed in a separate class. The study was conducted in eight sessions (experimental semester). Pre-test and post-test were administered over the study sample to evaluate the significant effect on participants' summary writing in both groups. The study results indicated that participants in both experimental and control groups achieved higher mean scores in their performance of summary writing in terms of content comparing to their mean scores in terms of coherence. Also, the results show that the performance of Twitter group in summary writing score higher results in favor of coherence compared to the control group. Therefore, new technology and social media means such as twitter contributes to solve many of the problems EFL (English as a Foreign Language) learners could face. This study aims to increase the motivation of Institutions of higher education to integrate Twitter with the educational process.

## Subject Areas

Language Learning, Applied Linguistics

## Keywords

Coherence, Content, EFL, Summarization, Twitter

## 1. Introduction

Due to the fact that college students go through a huge amount of reading and writing texts every semester (Chang *et al.*, 2013) [1], they should master summary writing as one of the academic skills. Therefore, Wichadee (2013) [2] stated that summary writing skill is considered a very vital skill because mastering it very properly would improve the whole learning process for college students.

However, college students face many problems that limit their ability to master summarization skill for many reasons. One of these reasons is due to the inability of the students to identify important ideas in the text (Wehmeyer, 2011) [3]. In this case, the summary may include many copied verbatim transcripts (Nguyen, 2011) [4]. Another problem is that students do not know the basic rules of the Summarization process, so students may reflect the original text clarifying their own opinion on the subject (Wehmeyer, 2011) [3]. Also, students do not have the ability to link phrases using appropriate links. Therefore, Wichadee (2013) [2] stressed the need to use a new technique through which to develop the ability of students to summarize and motivate them to the learning process effectively.

Different approaches have been adopted to teach students summary writing skill, such as Kintsch and Van Dijk (1978) [5], Brown and Day (1983) [6], Cunningham (1987) [7] and many other approaches. These approaches were based on the use of traditional methods of summarization, while Kintsch and Van Dijk (1978) [5] and Brown and Day (1983) [6] have been based their approaches on macro rules which involve deletion, generalization, integration, substituting terms, substituting, etc.

Technology can be used as a tool to help the students to practice summarization skill effectively; Williams (2011) [8] argued that summarization instruction using modern technology application has proved to be beneficial to learners. Micro blogging is a new form of blogs that allows users to publish brief texts, where the allowed number of characters in each text is between 140-200 characters (Grosbeck and Holotescu, 2008) [9]. Twitter is one of the most prominent blogs that allow users to communicate with each other by publishing (updates) text posts called “tweets” (Borau *et al.*, 2009) [10]. Harmandaoglu (2012) [11] stressed that micro blogging has attracted the attention of educators in the recent period in the possibility of its integration with the educational process. El-fatah and Ahmed (2015) [12] stressed that utilizing Twitter for a class discussion enhances the students’ summarization skills because it allows them to determine their ideas by assembling the appropriate vocabulary and using it to express their ideas.

The current study will attempt evaluate EFL learners’ summarization skill in limited text as compared to free writing. The researcher will use Twitter as a modern technique in teaching summary skills to the female students of Jouf University at Saudi Arabia. Chang *et al.* (2013) [1] emphasized that Twitter is one of the most prominent blogs that can be used for enhancing the summariz-

ing skill of the students. Twitter with its feature of 140-character limit is chosen as an application medium to practice summary writing in English language in terms of two elements of discourse features, *i.e.*, content and coherence. Consequently, this study intends to provide insights on the effect of 140-character limitation of Twitter for summary writing in EFL Saudi academic context. The study may also give impetus to future researchers to work more on the use of available applications such as Blackboard in improving the summary writing skills of EFL learners.

## 2. Literature Review

### 2.1. Approaches of Teaching Summary Writing

Certain approaches in teaching summary writing have been introduced which seem to have had significant impact on learners' performance better than a trial-and-error practice approach in which students write a summary in an unsystematic way. Among those approaches, there are three major ones proposed by Van Dijk and Kintsch (1978) [5], Brown and Day (1983) [6], and Cunningham (1987) [7].

In the seventies, Van Dijk and Kintsch (1978) [5] proposed an approach for teaching summary writing in which the information to be included in a summary production is determined by macro rules; deletion, generalization, construction. In their study, they argued that these macro rules of deletion, superordination, and selection and invention are general rules underlying reading comprehension of texts as well as carrying out a summary writing task. Taking this approach as a starting point, Brown, Day, and Jones (1983) [6] identified six basic rules of summarization. They presented six folk stories to different class levels: fifth-, seventh-, and eleventh-graders. They divided the stories into idea units in which each unit represented a single idea on a single line. Participants rated the importance of each unit on a four-point scale to the overall theme. Participants took home two stories with instructions stated to learn all the text with details, and to keep track of the time spent learning each story. A week later, participants wrote down all they could remember of the stories in a form of summarization to a newspaper. Researchers informed the participants that a summary was a "...short version of the story using the smallest number of words" (p. 971). After that, participants were handled papers with 40 spaces on the bottom and they were told to reduce their summaries for the newspaper editor to the stated spaces or less. Later, in the final phase, the process was repeated, but with more reduced space, 20 spaces.

Brown *et al.* (1983) [6] scored the participants' summaries for correct recall of units at every level of importance. They reported that getting participants to reach an 80% recall at every level was not possible for any grade level. However, participants displayed consistency in their ratings of units in summaries.

These findings provide empirical confirmation of the Kintsch and van Dijk (1978) [5] theory of prose comprehension. The six systematic rules of summari-

zation are: 1) deleting unnecessary or trivial material; 2) deleting material that is important but redundant; 3) substituting a superordinate term for a list of items; 4) substituting a superordinate term for components of an action; 5) selecting a topic sentence; and 6) inventing topic sentence, when there is none.

The two basic approaches listed above seem to capture the essence of the methods of condensation actually used by students when engaged in the formal task of summarizing (Brown & Day, 1983) [6]. Both approaches are somehow similar in a way that they are based on macro rules; one explicitly and the other implicitly. Therefore, a number of studies have based their research on either one of these approaches.

Cunningham (1982) [7] has been exploring a more intuitive approach in teaching summary writing in response to the difficulty and time associated with the explicit approaches. Intuitive approach generates interactions between schemata and text. It is called the intuitive approach, and it has been found to effectively improve students' reading comprehension and summary writing (Cunningham, 1982) [7]. It restricts the length of students' summarization so that they produced a constrained summary within 15 blanks. It is important to mention that Cunningham's summary procedure is indirectly based on a similar model of text comprehension proposed by Brown and Day (1983) [6] because students are required to delete trivial propositions and select topic statements to fit the 15-blank word limit.

Cunningham (1982) [7] contrasted fourth graders in a summary experimental group with those in a control group that focused on word level tasks in paragraphs taken from Boning's book *Getting the Main Idea* (1970). The criterion used in this study is accuracy; he found that students in the experimental group produced significantly more accurate summaries than students in the control group. By accurate he means how good macro level summary learners comprise based on a GIST summary measure.

Bean and Steenwyk (1984) [13] conducted a study where they used three forms of summarization instructions. They tested 60 sixth-grade students in three classes from a suburban district in southern California. Two are experimental groups; one received direct instruction in a macro rule approach to summarization and the other group received an intuitive approach in which they were asked to produce 15-word summaries. A control group simply received advice to find main ideas with no explicit modeling. Instructional materials consisted of 16 paragraphs from the sixth-grade level Barnell Loft collection. Each group met for 12 instructional sessions of 25 to 30 minutes over five weeks. Two dependent measures were used to judge the efficacy of the three instructional approaches to summarization: a paragraph summary writing task, and a standardized test of paragraph comprehension. On both measures, a comparison of the means showed that both experimental groups (the rule-governed and GIST groups) significantly outperformed the control group at  $p < 0.01$  and  $p < 0.05$ , respectively.

Regarding teaching summary writing in English as a foreign language, only a

few studies have been located. Yu (2008) [14] conducted a study in which he compared between Chinese learners' performance in Chinese and English as L1 and L2. Chinese undergraduates were asked to write summaries of extended English texts in both English and Chinese. It was found that the use of the different languages had significant effects on both summarization process and products. The study also found that English summaries received significantly higher scores in Right Statement Credit (RSC) score and holistic score (HS) than Chinese summaries.

Pakzadian and Rasekh (2012) [15] investigated the effects of summarization strategies training on undergraduates' level in reading comprehension. The study sample size consisted of 40 Iranian freshman university undergraduates at Payam Noor University. Due to the results of the TOEFL proficiency test, all participants were of low intermediate English proficiency. Results indicated that there is a statistically significant difference between students in reading comprehension performance before treatment (pre-test) and after the instruction (post-test) using paired sample T-test.

Chou (2012) [16] adopted two methods to guide 111 Taiwanese university students in writing summaries in English, which are the keyword and question generation. The results showed that with the help of keywords and question generation, the two approaches helped the majority of the participants improving their English reading and summary writing abilities on the basis of their performance in portfolio collection.

## 2.2. Twitter and EFL Summary Writing

Grosbeck and Holotescue (2008) [9] indicated that Twitter is a social networking site that can be used to teach writing for second language learners. Harmandaoglu (2012) [11] indicated to the ways in which Twitter can be used in writing, such as, the teacher asks students to write a question (Tweet-question) before the beginning of the lesson or during the lesson, so that the teacher will answer it orally.

The previous studies that investigated the effect of using Twitter as a modern technique to teach writing skill for foreign learners have reached to positive results. Kurtz (2009) [17] in his study concluded that Twitter is considered as an effective means of writing and editing for young students. In addition, Antenos-Conforti (2009) [18] concluded that using Twitter in teaching writing to university students would enhance students' accuracy in writing and improve their grammars skills.

Cheng (2012) [19] in his study uses EFL writing test and a questionnaire to test the students' attitude regarding using Twitter in learning and writing processes. The results showed that Twitter had a positive effect on the students' attitude. Elfatah and Ahmed (2015) [12] studied the effect of twitter on EFL writing. This study followed a pretest-posttest experimental-control group design. The results of the study showed that the experimental group outperformed the

control group on post-testing of writing, and this is mainly attributing to integrate Twitter in teaching writing to foreign learners.

Harmandaoglu (2012) [11] also stated that Twitter can also be used to summarize a particular topic, where one of the basic conditions for this summary is not to exceed 140 characters (Wichadee, 2013) [2]. Chang *et al.* (2013) [1] pointed out that summarizing skill is considered an important skill at the level of higher education because students use it greatly in this educational stage. Chang *et al.* (2013) [1] has proved that Twitter is an effective way to improve the skills of summarizing for the second language learners, and stressed that this aspect needs to be further research and study due to the lack and scarcity of studies aimed at detecting the impact of Twitter application as a modern technology to enhance the skills of EFL students to summarize.

More specifically, the results of previous researches confirmed the effective results from using Twitter in education (Kurtz, 2009; Antenos-Conforti, 2009; Wichadee, 2013). In addition, most of the previous studies, which aimed to link Twitter with the educational process, interested in the recruitment of Twitter in EFL learning or reading (Cheng, 2012; Harmandaoglu, 2012). As well as, the previous studies that are interested in the recruitment of Twitter in EFL writing did not focus on the skill of summary writing in particular (Chang *et al.*, 2013; Elfatah and Ahmed, 2015). All of that indicates that there is an existed gap in the previous literature and a dearth of academic studies on the use of technology for teaching EFL learners how to perform summary writing. The current study seeks to fill the gap existed in the previous literature.

### 3. Methodology

The main goal of the current study is to investigate whether Twitter with the limitation feature of 140-characters is an effective medium in which students would produce a concise and precise written summary better than the control group who practice summary writing in a free style without constraints. Four research questions regarding the efficacy of using Twitter on EFL students' summary writing guide this study. These questions are:

- 1) What is the performance of the Twitter Group in summary writing in terms of content and coherence after each summary task?
- 2) What is the performance of the non-Twitter Group in summary writing in terms of content and coherence after each summary task?
- 3) What impact does summary writing (SW) have on students' writing in terms of content and coherence?
- 4) Are there differences in performance in students' summary writing between the Twitter and non-Twitter groups, in terms of content and coherence at the end of the experimental semester?

Three comparisons were made throughout the stage of data analysis; all of them on the basis of content and coherence of students' performance. The first comparison was between the performance of Twitter group and non-Twitter

group after each summary writing task in terms of content and coherence. The second comparison was between the performances in students' summary writing between Twitter and non-Twitter groups in terms of content and coherence at the end of the experimental semester if there was any improvement in comparing between the pretest and post-test in both groups. The third comparison was between Twitter and non-Twitter group in terms of content and coherence of the final product in post-test.

#### 4. Procedures

At first, the participants were distributed into two groups, each of 30 students according to their scores in TOEIC. After that, the pre-test was administered to the two groups. Both groups had the same instructor but each group was instructed in a separate class.

Then, an introductory 1-hour session was run on the use of Twitter for the experimental group. The instructor helped the participants to open their own Twitter accounts. Participants then were asked to "follow" the instructor's account to facilitate checking their performance. Participants in twitter group were asked to tweet introducing themselves in order to become acquainted to the functions of Twitter. The participants in the control group (non-Twitter) were tested in a traditional classroom receiving instruction and practicing summary writing skills traditionally. Students in this group received the same materials and tasks but they were asked to write a summary in with no blanks stated.

The intuitive approach by Cunningham (1982) [7] was adopted in the experimental group in a form of 140-character limitation. That way, there were two variables between the Twitter group and non-Twitter group; was the medium of summary practice, *i.e.*, Twitter vs. No-Twitter and lack of constraints.

After that, a pretest (summary-writing test) was administered to both groups before the beginning of the eight sessions. The study was conducted in eight sessions (experimental semester), about 10 weeks, one week for each session, pre-test, and post-test. Each session lasted 30 minutes and that was scheduled within ENG 122 classes. The number of the sessions was chosen in order to get the students of the experimental group used to the constraint in Twitter when they practice summary writing.

At the end of the semester, a post-test was administered in order to see if the eight-session intervention had a significant effect on participants' summary writing in both groups. It is worth mentioning that the posttest was the same as the pretest; the period of time would cause the participants to forget the exact content of the pretest when they sit for it again in the posttest eight weeks later. Two examiners evaluated summary writings in all sessions independently after the experimental semester ended in order to insure the reliability of the scoring process.

#### 5. Results and Discussion

The Results of the study are presented in terms of the study questions and hy-

pothesis.

The first Question: What is the performance of Twitter group in summary writing in terms of content and coherence after each summary task?

To answer this question, computational mean and standard deviations were extracted to the Twitter group in summary writing in terms of content and coherence after each writing task.

**Table 1** shows that there are differences between the mean scores of the performance of Twitter group in summary writings in favor of coherence. The total mean for “content” reached (20.43), but total mean for “coherence” was (22.10).

Also, Independent t-test was applied to the performance of the experimental group in summary writing in terms of content and coherence; **Table 2** shows that:

**Table 2** shows that there are statistical significant differences in summary writing in terms of content and coherence, t. value was (4.466) by significant (0.000), the differences are in favor of coherence by mean (22.10), while the content was by mean (20.44).

The results showed that there was a statistically significant difference in the mean scores of the participants in summary writing in terms of content and coherence for the Twitter group. This may be due to the use of the Twitter in the application to practice summary writing in English language in terms of two elements of discourse features, *i.e.*, content and coherence. It was also noted that the Twitter contained activities and interesting applications for students.

These results are compatible with the results of a study by Grosbeck and Holotescue (2008) [9] that indicated that Twitter is a social networking site that can be used to teach writing for second language learners. It also agreed with Harmandaoglu (2012) [11] referred to the ways in which Twitter can be used in writing, such as, the teacher can ask students to (Tweet-question) before the beginning of the lesson or during the lesson, so that the teacher will answer it orally.

**Table 1.** Means and standard deviation for “performance of the twitter group” (n = 30).

| Variable  |                | Mean  | Standard Deviation |
|-----------|----------------|-------|--------------------|
| Content   | <b>Rater 1</b> | 20.35 | 1.897              |
|           | <b>Rater 2</b> | 20.52 | 1.721              |
|           | <b>Total</b>   | 20.43 | 1.798              |
| Coherence | <b>Rater 1</b> | 22.13 | 2.337              |
|           | <b>Rater 2</b> | 22.07 | 2.226              |
|           | <b>Total</b>   | 22.10 | 2.263              |

**Table 2.** Independent t-test results of twitter group in summary writing.

|                 | Type      | No of Ts | Mean  | Std. Error Mean | SD   | T-Value | DF  | Sig.  |
|-----------------|-----------|----------|-------|-----------------|------|---------|-----|-------|
| Summary writing | Content   | 60       | 20.44 | 0.232           | 1.80 | 4.466   | 118 | 0.000 |
|                 | Coherence | 60       | 22.10 | 0.292           | 2.26 |         |     |       |



The second question: What is the performance of the non-Twitter group in summary writing in terms of content and coherence after each summary task?

To answer this question, computational mean and standard deviations were extracted to non-Twitter group in summary writing in terms of content and coherence after each summary writing task.

**Table 3** shows that there are differences between the mean scores of the performance of non-Twitter group in their summary writing, and it was in favor of content. The total mean for “content” reached (17.33), while the total mean for “coherence” was (16.95).

Also, Independent t-test was applied to show the performance of the control group in summary writing in terms of content and coherence, **Table 4** shows that:

**Table 4** shows that there are no statistical significant differences in summary writing in terms of content and coherence; t. value was (0.436) by significant (0.663). The results showed that there was no statistically significant difference in the mean scores of the participants in summary writing in terms of content and coherence for non-Twitter group.

These results agreed with the results of a study by McNeil and Donant (1982) [20] in which they randomly assigned 23 fifth-grade students to one of three groups, eight participants in each group, in order to explore the effect of macro rules approach on students’ summary writing and reading comprehension. Participants in the experimental group received instruction in the six rules using passages of about third-grade difficulty.

The third question: What impact does summary writing (SW) have on students’ writing in terms of content and coherence?

To answer this question, a paired t-test (SPSS program) was used to compare

**Table 3.** Means and standard deviation for “performance of the non-Twitter Group” (n = 30).

| Variable  |         | Mean  | Standard Deviation |
|-----------|---------|-------|--------------------|
| Content   | Rater 1 | 17.26 | 4.034              |
|           | Rater 2 | 17.41 | 4.106              |
|           | Total   | 17.33 | 4.036              |
| Coherence | Rater 1 | 16.96 | 5.510              |
|           | Rater 2 | 16.95 | 5.421              |
|           | Total   | 16.95 | 5.419              |

**Table 4.** Independent t-test results to the non-Twitter group in summary writing.

|                        | Type      | No of Ts | Mean  | Std. Error Mean | SD   | T-Value | DF  | Sig.  |
|------------------------|-----------|----------|-------|-----------------|------|---------|-----|-------|
| <b>Summary writing</b> | Content   | 60       | 17.33 | 0.521           | 4.04 | 0.436   | 118 | 0.663 |
|                        | Coherence | 60       | 16.95 | 0.700           | 5.42 |         |     |       |

the students mean scores in both Twitter and non-Twitter groups on the pre-post tests in terms of content and coherence

**Table 5** shows that there are no significant differences between the mean scores of the pre and post administrations of summary writing in terms of content at significance level ( $\alpha \leq 0.05$ ), t-value was (1.242), (1.615) by significant (0.224), (0.117) respectively. There is a significant difference between the mean scores of the pre and post administrations of summary writing in terms of coherence at significance level ( $\alpha \leq 0.05$ ), t-value was (3.811), (3.271) by significant (0.001), (0.003), in favor of post-test by means (22.67), (22.32), but means for pre-test was (21.63), (21.29) respectively.

**Table 6** shows that:

- There are no significant differences between the mean scores of the pre and post administrations of summary writing in terms of content at significance level ( $\alpha \leq 0.05$ ), t-value was (0.781), (1.183) by significant (0.441), (0.246) respectively.
- There are no significant difference between the mean scores of the pre and post administrations of summary writing in terms of coherence at significance level ( $\alpha \leq 0.05$ ), t-value was (1.067), (0.888) by significant (0.295), (0.382) respectively.

**Table 7** shows that:

There are significant differences between the mean scores of the pre and post tests of summary writing in terms of content for Twitter group at significance level ( $\alpha \leq 0.05$ ), t. value was (2.023) by significant (0.048), in favor of post-test by means (21.60), while means for pre-test was (21.16). Also, there are significant differences between the mean scores of the pre and post administrations of summary writing in terms of coherence for Twitter at significance level ( $\alpha \leq 0.05$ ), t. value was (5.010) by significant (0.000), in favor of post-test by means (22.49), but means for pre was (21.46).

There are no significant differences between the mean scores of the pre and post administrations of summary writing in terms of content for Non-Twitter at

**Table 5.** t-test results of the students' pre-post test comparison in Twitter group of content and coherence.

| Rater          | Type             | Test         | Mean         | No.       | SD           | Std. Error Mean | T-Value | DF | Sig.         |
|----------------|------------------|--------------|--------------|-----------|--------------|-----------------|---------|----|--------------|
| <b>Rater 1</b> | <b>Content</b>   | Pre.         | 21.12        | 30        | 2.947        | 0.538           | 1.242   | 29 | <b>0.224</b> |
|                |                  | Post.        | 21.52        | 30        | 2.426        | 0.443           |         |    |              |
|                | <b>Coherence</b> | Pre.         | 21.63        | 30        | 2.619        | 0.478           | 3.811   | 29 | <b>0.001</b> |
|                |                  | Post.        | 22.67        | 30        | 2.210        | 0.404           |         |    |              |
| <b>Rater 2</b> | <b>Content</b>   | Pre.         | 21.21        | 30        | 2.770        | 0.506           | 1.615   | 29 | <b>0.117</b> |
|                |                  | Post.        | 21.68        | 30        | 2.409        | 0.440           |         |    |              |
|                | <b>Coherence</b> | Pre.         | 21.29        | 30        | 2.577        | 0.471           | 3.271   | 29 | <b>0.003</b> |
|                |                  | <b>Post.</b> | <b>22.32</b> | <b>30</b> | <b>2.139</b> | <b>0.391</b>    |         |    |              |

**Table 6.** t-test results of the students' pre-post test comparison in non-Twitter group in terms of content and coherence.

| Rater          | Type             | Test         | Mean         | No.       | SD           | Std. Error Mean | T-Value | DF | Sig.         |
|----------------|------------------|--------------|--------------|-----------|--------------|-----------------|---------|----|--------------|
| <b>Rater 1</b> | <b>Content</b>   | Pre.         | 16.90        | 30        | 5.416        | 0.989           | 0.781   | 29 | <b>0.441</b> |
|                |                  | Post.        | 17.47        | 30        | 5.762        | 1.052           |         |    |              |
|                | <b>Coherence</b> | Pre.         | 15.78        | 30        | 6.133        | 1.120           | 1.067   | 29 | <b>0.295</b> |
|                |                  | Post.        | 16.80        | 30        | 6.620        | 1.209           |         |    |              |
| <b>Rater 2</b> | <b>Content</b>   | Pre.         | 16.90        | 30        | 5.445        | 0.994           | 1.183   | 29 | <b>0.246</b> |
|                |                  | Post.        | 17.80        | 30        | 5.624        | 1.027           |         |    |              |
|                | <b>Coherence</b> | Pre.         | 16.10        | 30        | 6.204        | 1.133           | 0.888   | 29 | <b>0.382</b> |
|                |                  | <b>Post.</b> | <b>16.93</b> | <b>30</b> | <b>6.678</b> | <b>1.219</b>    |         |    |              |

**Table 7.** t-test results of the participants' pre-post test comparison between content and coherence in both groups.

| Rater              | Type             | Test         | Mean         | SD           | Std. Error Mean | T-Value | Sig.         |
|--------------------|------------------|--------------|--------------|--------------|-----------------|---------|--------------|
| <b>Twitter</b>     | <b>Content</b>   | Pre.         | 21.16        | 2.836        | 0.366           | 2.023   | <b>0.048</b> |
|                    |                  | Post.        | 21.60        | 2.398        | 0.310           |         |              |
|                    | <b>Coherence</b> | Pre.         | 21.46        | 2.582        | 0.333           | 5.010   | <b>0.000</b> |
|                    |                  | Post.        | 22.49        | 2.164        | 0.279           |         |              |
| <b>Non-Twitter</b> | <b>Content</b>   | Pre.         | 16.90        | 5.384        | 0.695           | 1.406   | <b>0.165</b> |
|                    |                  | Post.        | 17.63        | 5.648        | 0.729           |         |              |
|                    | <b>Coherence</b> | Pre.         | 15.94        | 6.118        | 0.790           | 1.396   | <b>0.168</b> |
|                    |                  | <b>Post.</b> | <b>16.86</b> | <b>6.593</b> | <b>0.851</b>    |         |              |

significance level ( $\alpha \leq 0.05$ ), t. value was (1.406) by significant (0.165). And there are no significant differences between the mean scores of the pre and post administrations of summary writing in terms of coherence for Non-Twitter at significance level ( $\alpha \leq 0.05$ ), t. value was (1.396) by significant (0.168).

The results showed that there was a statistically significant difference in the mean scores of the participants in the pre and post-tests, between the two groups (Twitter and non-Twitter groups), in summary writing in terms of content and coherence test favoring the post-test. This shows that the Twitter with the limitation feature of 140-characters is effective in helping students to produce a concise and precise written summary.

These results agreed with the results of a study by Elfatah and Ahmed (2015) [12] that studied the effect of twitter on EFL writing. This study followed a pre-/post-test experimental-control group design. The results of the study showed that the experimental group who used Twitter outperformed the control group on post-testing of writing, and this is mainly attributing to integrate Twitter in teaching writing to foreign learners.

It also agreed with Chang *et al.* (2013) [1] has proved that Twitter is an effective way to improve the skills of summarizing for the second language learners, and stressed that this aspect needs to be further research and study due to the lack and scarcity of studies aimed at detecting the impact of Twitter application as a modern technology to enhance the skills of EFL students to summarize.

The fourth question: Do students in the Twitter and non-Twitter groups show improvement in their summary writing in terms of content and coherence at the end of the experimental semester?

To answer this question, independent t-test (SPSS program) was used to the differences between the Twitter and non-Twitter groups' performance students' in summary writing, in terms of the content and coherence.

**Table 8** shows that:

- There is a statistically significant difference at significant level ( $\alpha \leq 0.05$ ) of the summary writing in terms of content and coherence at the end of the experimental semester, where "t" value reached (3.548) by statistically significant (0.001) of content. While "t" value reached (4.604) by statistically significant (0.000) of coherence.
- There is a statistical significant difference in students' summary writing in terms coherence and content between Twitter and non-Twitter groups, t. value was (3.476) by significant (0.001) in favor of the Twitter group by means (21.68) but means for non-Twitter group (17.80). While "t" value reached (4.211) by statistically significant (0.000) of coherence, favor of the Twitter group by means (22.32) but means for non-Twitter group (16.93).

**Table 9** shows that there is a statistical significant difference in students' summary writing in terms coherence and content between Twitter and non-Twitter groups, t. value of content was (5.007) by significant (0.000) favor of Twitter group by means (21.60) but means for non-Twitter group (17.63). And t. value of coherence was (6.284) by significant (0.000) favor of the Twitter group by means (22.49) but means for non-Twitter group (16.86).

**Table 8.** The results of (Independent sample T Test) to identify the differences between the Twitter and non-Twitter groups performance students' in summary writing for both raters.

|                |           | Group                         | Mean         | SD           | Std. Error Mean | T-Value | Sig.         |
|----------------|-----------|-------------------------------|--------------|--------------|-----------------|---------|--------------|
| <b>Rater 1</b> | Content   | <b>Non-Twitter</b> (Control)  | 17.47        | 5.762        | 1.052           | 3.548   | <b>0.001</b> |
|                |           | <b>Twitter</b> (Experimental) | 21.52        | 2.426        | 0.443           |         |              |
|                | Coherence | <b>Non-Twitter</b> (Control)  | 16.80        | 6.620        | 1.209           | 4.604   | <b>0.000</b> |
|                |           | <b>Twitter</b> (Experimental) | 22.67        | 2.210        | 0.404           |         |              |
| <b>Rater 2</b> | Content   | <b>Non-Twitter</b> (Control)  | 17.80        | 5.624        | 1.027           | 3.476   | <b>0.001</b> |
|                |           | <b>Twitter</b> (Experimental) | 21.68        | 2.409        | 0.440           |         |              |
|                | Coherence | <b>Non-Twitter</b> (Control)  | 16.93        | 6.678        | 1.219           | 4.211   | <b>0.000</b> |
|                |           | <b>Twitter (Experimental)</b> | <b>22.32</b> | <b>2.139</b> | <b>0.391</b>    |         |              |

**Table 9.** The results of (Independent sample T Test) to identify the differences between the Twitter and non-Twitter groups performance students' in summary writing.

|           | Group                         | Mean         | SD           | Std. Error Mean | T-Value | Sig.         |
|-----------|-------------------------------|--------------|--------------|-----------------|---------|--------------|
| Content   | <b>Non-Twitter</b> (Control)  | 17.63        | 5.648        | 0.729           | 5.007   | <b>0.000</b> |
|           | <b>Twitter</b> (Experimental) | 21.60        | 2.398        | 0.310           |         |              |
| Coherence | <b>Non-Twitter</b> (Control)  | 16.86        | 6.593        | 0.851           | 6.284   | <b>0.000</b> |
|           | <b>Twitter (Experimental)</b> | <b>22.49</b> | <b>2.164</b> | <b>0.279</b>    |         |              |

The hypothesis that the present study is trying to examine is:

**H0: the performance of experimental group in summary writing skill when using Twitter will not improve compared to the performance of the control group who practice summarization traditionally without any constraint.**

As can be seen in **Table 8** and **Table 9** there is a statistically difference at significant level ( $\alpha \leq 0.05$ ) of the summary writing in terms of content and coherence at the end of the experimental semester, There is a statistical significant difference in students' summary writing in terms of coherence and content between Twitter and non-Twitter groups. **Table 9** shows that there is a statistical significant difference in students' summary writing in terms of coherence and content between Twitter and non-Twitter groups, t. value of content was (5.007) by significant (0.000) in favor of Twitter group by means (21.60) but means for non-Twitter group (17.63). And t. value of coherence was (6.284) by significant (0.000) favor of the Twitter group by means (22.49) but means for non-Twitter group (16.86). The above results show that summary writing skills when using Twitter have been improved compared to the performance of the control group.

The results showed that there was a statistically significant difference in students' summary writing in terms of coherence and content between Twitter and non-Twitter groups favoring the Twitter group. This shows that a lot of students have applied many of the skills, using Twitter with high efficiency.

These results agreed with the results of a study by Kurtz (2009) [17] in his study concluded that Twitter is considered as an effective means of writing and editing for young students. In addition, Antenos-Conforti (2009) [18] concluded that using Twitter in teaching writing to university students would enhance students' accuracy in writing and improve their grammars skills. Cheng (2012) [19] in his study uses EFL writing test and a questionnaire to test the students' attitude regarding using Twitter in learning and writing processes. The results showed that Twitter had a positive effect on the students' attitude. Also, researches confirmed the effective results of using Twitter in education, such as (Kurtz, 2009; Antenos-Conforti, 2009; Wichadee, 2013).

## 6. Implications of the Study

The main aim of this study is to investigate if using applications with constraint

has a significant effect on the performance of summary writing of EFL learners in Saudi college context. It also aims to present strengths and weaknesses in using such application. The findings of this study suggest the following:

- 1) EFL learners may benefit more from performing summary writing in *Twitter* in terms of coherence.
- 2) Students may be more interested and self-directed to use technological application to improve their summary writing according to the user's pace. The use of computers or devices at home by students, for instance, is an extension in the time and place of the writing task in general.

## 7. Conclusions

The analyses of the results of the present study revealed that the participants achieved the main aim of the study as their performance level in writing a concise and precise summary was improved due to the *Twitter* in the limitation of 140-characters. The results proved that participants seem to have opportunities to improve their performance when:

Participants in both experimental and control groups achieved higher mean scores in their performance of summary writing in terms of content comparing to their mean scores in term coherence. While participants in both experimental and control groups did not achieve any improvement in their summary writing in terms of content throughout the experimental semester. And therefore, that technology contributes to solve many of the struggles faced by students.

Participants in the experimental group achieve improvements in their summary writing in terms of coherence throughout the experimental semester. On the other hand, participants in the control group did not achieve any improvement in their summary writing in terms of coherence throughout the experimental semester. Finally, participants using *Twitter* to perform their summary writing achieved better results in terms of coherence than those in a conventional classroom, demonstrating that the limitation of *Twitter* is an effective method for improving summary writing.

## 8. Recommendations

In terms of the significant findings of the present study, the following recommendations are advised to be implemented that may assist in developing EFL learners' writing skills in general and their summary writing in particular by using *Twitter*:

- 1) *Twitter* or any similar application may be used more in ELT in Saudi Arabia, especially in the areas of writing skills.
- 2) ELT staff in Saudi educational establishments can be trained to use such mediums as a normal part of their work.
- 3) E-learning Deanship in Jouf University can cooperate with Blackboard Company to launch a feature that limits the users' writing with stated blanks in order to use it in training EFL learners to master the appropriate writing skills.

4) Appropriate exercises for practicing summary writing as an independent skill must be carefully selected or constructed, so our expectations of benefits may be achieved.

### Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

### References

- [1] Chang, Y., Wang, X., Mei, Q. and Liu, Y. (2013) Towards Twitter Context Summarization with User Influence Models. *6th ACM International WSDM Conference*, Rome, 4-8 February 2013, 527-536. <https://doi.org/10.1145/2433396.2433464>  
<http://www-personal.umich.edu/~qmei/pub/wsdm2013-chang.pdf>
- [2] Wichadee, S. (2013) Improving Students' Summary Writing Ability through Collaboration: A Comparison between Online WIKI Group and Conventional Face-to-Face Group. *The Turkish Online Journal of Educational Technology*, **12**, 107-116.
- [3] Wehmeyer, D. (2011) Summary Writing.  
<http://www.wisc-online.com/objects/ViewObject.aspx?ID=TRG2603>
- [4] Nguyen, T. (2011) The Problems That Students Encounter in Writing Summaries and Recommended Guidelines.  
<http://www.dlu.edu.vn/FileUpload/20113219479734.doc>
- [5] Kintsch, W. and van Dijk, T.A. (1978) Toward a Model of Text Comprehension and Production. *Psychological Review*, **85**, 363-394.  
<https://content.apa.org/doi/10.1037/0033-295X.85.5.363>
- [6] Brown, A. and Day, J. (1983) Macro Rules for Summarizing Texts: The Development of Expertise. *Journal of Learning and Verbal Behavior*, **22**, 1-16.
- [7] Cunningham, J.W. (1987) Generating Interactions between Schemata and Text. In: Niles, J.A. and Harris, L.A., Eds., *New Inquiries in Reading Research and Instruction*, National Reading Conference, Rochester, 42-47.
- [8] Williams, A.R. (2011) Using Text Messaging to Summarize Text. *STRATE Journal*, **21**, 24-28.
- [9] Grosseck, G. and Holotescu, C. (2008) Can We Use Twitter for Educational Activities? *4th International Scientific Conference, eLearning and Software for Education*, Bucharest, 17-18 April 2008.  
<http://portaldoprofessor.mec.gov.br/storage/materiais/0000012008.pdf>
- [10] Borau, K., Ullrich, C., Feng, J. and Shen, R. (2009) Microblogging for Language Learning: Using Twitter to Train Communicative and Cultural Competence. *International Conference on Web-Based Learning 2009*, Aachen, 19-21 August 2009, 78-87.  
[https://doi.org/10.1007/978-3-642-03426-8\\_10](https://doi.org/10.1007/978-3-642-03426-8_10)
- [11] Harmandaoglu, E. (2012) The Use of Twitter in Language Learning and Teaching. *International Conference "ICT for Language Learning"*, 5th Edition, Florence, 15-16 November 2012.  
[https://conference.pixel-online.net/conferences/ICT4LL2012/common/download/Paper\\_pdf/211-IBT41-FP-Harmandaoglu-ICT2012.pdf](https://conference.pixel-online.net/conferences/ICT4LL2012/common/download/Paper_pdf/211-IBT41-FP-Harmandaoglu-ICT2012.pdf)
- [12] Elfatah, M. and Ahmed, A. (2015) The Effect of Twitter on Developing Writing Skills in English as a Foreign Language. *Arab World English Journal*, No. 2, 134-149.
- [13] Bean, T.W. and Steenwyk, F.L. (1984) The Effect of Three Forms of Summarization

- Instruction on Sixth Graders' Summary Writing and Comprehension. *Journal of Reading Behavior*, **16**, 297-306. <https://doi.org/10.1080/10862968409547523>
- [14] Yu, G. (2008) Reading to Summarize in English and Chinese: A Tale of Two Languages? *Language Testing*, **25**, 521-551. <https://doi.org/10.1177%2F0265532208094275>
- [15] Pakzadian, M. and Rasekh, A. (2012) The Effect of Using Summarization Strategies on Iranian EFL Learners' Reading Comprehension. *English Linguistics Research*, **1**, 118-125. <https://doi.org/10.5430/elr.v1n1p118>
- [16] Chou, M. (2012) Implementing Keyword and Question Generation Approaches in Teaching EFL Summary Writing. *English Language Teaching*, **5**, 36-41. <https://doi.org/10.5539/elt.v5n12p36>
- [17] Kurtz, J. (2009) Twittering about Learning: Using Twitter in an Elementary School-classroom. *Horace*, **25**, 1-4.
- [18] Antenos-Conforti, E. (2009) Microblogging on Twitter: Social Networking in Intermediate Italian Classes. In: Lomicka, L. and Lords, G., Eds., *The Next Generation: Social Networking and Online Collaboration in Foreign Language Learning*, Computer-Assisted Language Instruction Consortium, San Marcos, 59-90.
- [19] Cheng, H.Y. (2012) Apply Twitter to EFL Reading and Writing in A Taiwanese College Setting. PhD. Thesis, Indiana State University Terre Haute, Terre Haute.
- [20] Mcneil, J. and Donant, L. (1982) Summarization Strategy for Improving Reading Comprehension. In: Niles, J.A. and Harris, L.A., Eds., *New Inquiries in Reading Research and Instruction*, National Reading Conference, Rochester, 215-219.